

Abstract (Clean Copy)

1,3-butadiene is obtained by extractive distillation with a selective solvent from a C<sub>4</sub> cut comprising C<sub>4</sub> acetylenes as secondary components in a dividing wall column having a bottom evaporator, in which a dividing wall is disposed in the longitudinal direction of the column to form a first subregion, a second subregion and a lower combined column region. The column is disposed upstream of an extractive wash column. The energy input into the dividing wall column via the bottom evaporator is controlled in such a way that a bottom stream containing solvent, C<sub>4</sub> acetylenes and 1,3-butadiene is restricted such that the loss of 1,3-butadiene is economically acceptable, is drawn off and fed to an acetylenes outgasser where the C<sub>4</sub> acetylenes are stripped out overhead and purified solvent is obtained as the bottom stream.